# Effectiveness of cognitive-behavioral techniques as a treatment for panic disorders



# Sanz Cortés, A., Sotoca Plaza, A., Gómez Torres, Z., García-Vera, M.P., and Sanz. J.



Clinical and Health Psychology Unit, Complutense University of Madrid, Spain

# INTRODUCTION

Studies demonstrating efficacy of cognitive-behavioral therapies for panic disorders with or without agoraphobia have predominantly been conducted in research settings, with the most optimal and controllable conditions possible (e.g., homogeneous samples, random assignation, especially trained therapists, use of very structured treatment manuals).

Investigation of the effectiveness of these therapies when provided in habitual clinical practice is lacking and much needed, since in normal clinical settings, therapies are applied to a much more heterogeneous population and treatment application is flexible, self-correcting, and undertaken by clinical professionals who vary considerably in their training level and clinical experience.

### AIM

To determine the effectiveness or clinical utility of cognitive-behavioral therapies for panic disorders with or without agoraphobia when provided in conditions that match those of habitual clinical practice.

# METHOD

Participants: Adult patients with a primary DSM-IV diagnosis of panic disorder (PAD) with or without agoraphobia who were treated in the Clinical and Health Psychology Unit at the Complutense University of Madrid, an outpatient setting

Table 1. Characteristics of participants in this study and comparison with those of participants in the average efficacy study or with those of norm patient groups

|  | This study | Efficacy studies |
|--|------------|------------------|
| Ν  | 30         | 46 †             |
| Mean age (years)   | 32.5       | 37 †             |
| Sex (% of females)   | 70.0       | 82.4 †           |
| Mean number of treatment sessions                            | 13.4       | 13.7 ‡           |
| DSM-IV diagnosis (%)   |            |                  |
| - Panic disorder (PAD) with agoraphobia                      | 53.3       | No data          |
| <ul> <li>Panic disorder (PAD) without agoraphobia</li> </ul> | 46.7       | No data          |
|  | This study | Patient norms ¶  |
| Mean ACQ score at pre-treatment (range 1-5)                  | 2.6 *      | 2.4              |
| Mean BSQ score at pre-treatment (range 1-5)                  | 3.2 *      | 3.0              |

Note:  $\uparrow$  Mattick et al.'s meta-analysis (1990)  $\ddagger$  Studies using exposure + cognitive techniques in Chambless & Gillis's meta-analysis (1993). \* N = 21 and 19 for mean ACQ and BSQ scores, respectively. ¶ N = 253 patients with panic with agoraphobia (Chambless, 2005)

Procedure: All patients were treated with multicomponent programs based on the following cognitive-behavioral techniques

#### Psychoeducation + Relaxation + Exposure + Cognitive Restructuring

#### Measures of panic-agoraphobic spectrum symptomatology:

For 70% of patients (n = 21), there were pre- and post-treatment measures on standardized self-report tests of panic-agoraphobia symptoms: the Body Sensations and Agoraphobic Cognitions Questionnaires (BSQ, ACQ; Chambless et al., 1984), and the Inventory of Agoraphobia, Cognitive part (IAC; Echeburúa & Corral, 1997).

To analyze conjointly all measures, they were converted into 0-100 scales where 100 is the maximum score of the instrument.

#### Measures of diagnostic status:

For all patients, there were post-treatment measures of the number of DSM-IV symptomatologic criteria met for PAD with or without agoraphobia as assessed by a clinical interview

#### Indices of treatment effectiveness:

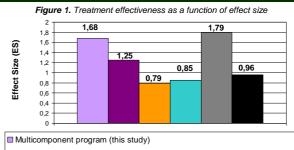
\* Effect size: standardized mean difference (d) defined as the difference between pre- and post-treatment mean panic-agoraphobia scores divided by the standard deviation of the pre-treatment scores.

#### \* % of improved patients at post-treatment:

% of patients free of panic attacks.

. % patients who did not meet any of the DSM-IV symptomatologic criteria for PAD with or without agoraphobia.



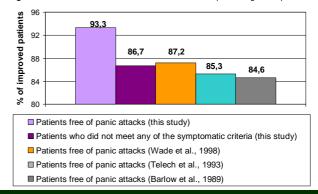


Cognitive-behavioral therapy (CBT) without exposure (van Balkom et al., 1997)

- In vivo exposure (van Balkom et al., 1997)
- In vivo exposure + placebo (van Balkom et al., 1997)
- In vivo exposure + antidepressants (van Balkom et al., 1997)

■ CBT + in vivo exposure (van Balkom et al., 1997)

Figure 2. Treatment effectiveness as a function of the percentage of improvement



# CONCLUSION

- The multicomponent cognitive-behavioral programs for panic disorders administered in our clinic, a regular outpatient setting, showed to be effective in terms of both effect size and clinical significance.
- We found a large pre-post effect size (d) of 1,68 suggesting that the average panic patient at post-treatment would be at 95th centil of the distribution of patients at pre-treatment. We also found that between 86% and 93% of panic patients showed a clinically significant improvement at post-treatment
- In sum, for panic disorders, the results of the multicomponent programs based on empirically supported cognitive-behavioral techniques seem to be as good in habitual clinical practice as in efficacy studies.

# REFERENCES

- w. D. H., Craske, M. G., Cerny, J. A., & Klosko, J. S. (198) bless, D. L., & Gillis, M. M. (1993). Cognitive therapy of a bless, D. L. (2005). Agoraphobic Cognitions Questionnaii rom: http://www.unc.edu/~chambles. ment of panic disorder. Behavior Therapy, 20, 261–282. numal of Consulting and Clinical Psychology, 61, 248-260. ns Questionnaire: Scoring instructions & conditions. Retrieved June 16, 2005, nxiety disorders. e & Body Sense
- - Ma
- Te
- Memar Disease, 178, 567-576.
  Teich, M., J., Lucas, J. A., Schmidt, N. B., Hanna, H. H., LaNae, J. T., & Lucas, R. A. (1993). Group cognitive-behavioral treatment of panic disorder. *Behaviour Research and Threngy*, 31, 279–287.
  Van Balkmon, A. J. L. M., Bakker, A., Spinhoven, P. H., Blaavw, B. M. J. W., Smeenk, S. & Ruussink, B. (1997). A meta-analysis of the treatment of panic disorder with writhout agraphaback. A comparison of psychopharmacological, cognitive-behavioral, and combination treatments. *The Journal of Nervous and Membril Disease*, 188(8), 510-516. and Mental Diseas ide, W. et al. (1998). ansporting an empirically supported treatment for panic disorder to a service clinic setting: a benchmarking strategy. Journal of Psychology, 66(2), 231-239.

## ACKNOWLEDGEMENTS AND ADDRESS

he other intern psychologiss of the Clinical and Health Psychology Unit at the UCM (Elena Arderius Sánchez, Cristina Castilla Baylos, Ana Enjuanes isga Escolar Yague, Ignacio Fernández Arias, Helena Olivera Pérez-Frade, Beatriz Rodríguez Ruano, Laura Romero Colino, and Victor Manuel de la as) for their assistance at several stages of this research. García, Torre Igl Address for correspondence: María Paz García-Vera, Unidad de Psicología Clínica y de la Salud, Universidad Computense de Madrid, Campus de Somosaguas 28223 Madrid, Spain. E-mail: mpgvera@psi.ucm.es